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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,060	09/27/2007	Patrick Brouhon	200207058-4	1734
22879 7590 12/21/2009 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528			EXAMINER WOLDEMARIAM, AKILILU K	
			ART UNIT 2624	PAPER NUMBER
			NOTIFICATION DATE 12/21/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/571,060	Applicant(s) BROUHON, PATRICK	
	Examiner AKLILU k. WOLDEMARIAM	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/15/2009, 03/08/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1 and 49 have been amended. Claim 50 has been added. Claims 31-50 are still pending with claims 1, 49 and 50 being an independent.

Response to Arguments

2. Applicant's arguments, see pages 8-19, filed 10/08/2009, with respect to the rejection of claims 31-50 under 35 U.S.C. 103 have been fully considered. The arguments about amended claims 1 and 49 are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Lapstun et al., "Lapstun" (U.S. Patent number 7, 400, 769 B2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 31-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapstun et al., "Lapstun" (U.S. Patent number 7, 400, 769 B2) in view of Priddy et al., "Priddy" (U.S. Patent number 5, 464, 974) and further in view of Peter (International Publication Number WO 01/71644A1 from IDS).

Regarding claims 31, 49 and 50, *Lapstun discloses* a method of generating an image comprising a position identifying pattern (*see abstract and items 3 and 4, fig.1, i.e., pattern identifying*) and content (*see fig.4, object content, i.e., "the content") and a*

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computer usable medium having computer usable program code embodied therewith, the computer usable program code (software, i.e., "the program code") (see items 147 and 148, fig.10 and col.8, lines 8-16) and a printer client, i.e., pen, comprising a processor (processor) for producing documents (see fig.7 and item 145, fig.10) the method comprising the steps of:

with a printer client (pen, i.e., "the print client") comprising a computer, identifying such a region (segment, i.e., "the region") in the image (see figs.7 and 8); and

with the printer client (pen, i.e., "the print client"), selecting a characteristic of the pattern (see figs.7 and 8) or the content in the region (segment, i.e., "the region") identified by the printer client (pen, i.e., "the print client") on the basis of the criteria (see figs. 4, 7 and 8) , such that the image in the region (segment, i.e., "the region") meets the criteria (see figs.4, 7 and 8).

a pattern allocation module (software, i.e., "the module") configured to allocate an area of pattern space (memory, i.e., "the allocate an area of pattern space") to the document (see item 145, fig.7 and items 147 and 148, fig.10 and col.8, lines 8-16).

generate position identifying pattern for that area using a pattern generation algorithm (software, i.e., "the algorithm") (see item 145, fig.7 and items 147 and 148, fig.10 and col.8, lines 8-16).

a printer driver (printing element, i.e., "the printer driver") configured to combine content (see item 300, fig.17) and the position identifying pattern into a single file (static element, i.e., "single file") (see abstract and items 3 and 4, fig.1 and item 300, fig.17 and item 843, fig.28).

Lapstun does not disclose defining criteria relating to a region where the content and the pattern are superimposed,

the criteria determining whether the pattern will be distinguishable over the content when applied to a product.

However, *Priddy* discloses defining criteria (*determination of density, i.e., "the defining criteria"*) relating to a region where the content (*see items 104, 106 and 108, fig.5*).

It would have been obvious to ordinary skill in the art at the time when the invention was made to use Priddy's defining criteria relating to a region where the content in Lapstun's with a printer client comprising a computer, identifying such a region because it will allow to determine the criteria for example physical size and density, [*Priddy, see col.2, lines 39-41*].

Lapstun and Priddy do not disclose the pattern are superimposed and the criteria determining whether the pattern will be distinguishable over the content when applied to a product.

However, Peter discloses the patterns (pattern) are superimposed (overlapping, i.e., "superimposed") (*see page 8, lines 13-25 and page 9, line 25-page 10, line 5*) and the criteria determining whether the pattern will be distinguishable over the content when applied to a product (the print patterns, i.e., "the product") (*see fig.1 and page 8, lines 13-25 and page 9, line 25-page 10, line 5*).

It would have been obvious to ordinary skill in the art at the time when the invention was made to use Peter's the patterns are superimposed in the combined method of

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Lapstun's and Priddy's in defining criteria relating to a region where the content because it will allow to provide an improved solution for storing additional information in and reading additional information from images, *[Peter, page 2, lines 11-13]*.

Regarding claim 32, *Priddy discloses* a method according to claim 31 wherein the characteristic (*determining of density, i.e., "characteristic"*) is a characteristic of the pattern (*see items 104, 106 and 108, fig.5, determining of density, determining cells position and identify pattern distribution key*).

Regarding claim 33, *Priddy discloses* a method according to claim 32 wherein the characteristic of the pattern within the region is selected depending on the density of the content within the region (*determines the density of cells contained within matrix, i.e., "the density of the content within the region" and matrix, i.e., "the region"*) (*see items 104, 106 & 108, fig.5, determining density and col.6, lines 6-11*).

Regarding claim 34, *Priddy discloses* a method according to claim 33 wherein the pattern is made up of a plurality of pattern elements (*determines the density of cells, i.e., "the plurality of pattern elements"*) and the characteristic is the density of each of the pattern elements (*determines the density of cell contained within matrix, i.e., "the density of each of the pattern elements"*) (*see items 104, 106 & 108, fig.5, determining density and col.6, lines 6-11*).

Regarding claim 35, *Priddy discloses* a method according to claim 34 wherein the density of each of the pattern elements is selected a high density (*determines the density of cells*) and a low density (*determines the density of cells*) (*see col.6, lines 6-11*).

Regarding claim 36, *Priddy discloses* a method according to claim 35 wherein the high density corresponds to the pattern elements being substantially covered with marking material (*printer*), when the image is applied to a product (*product, i.e., "the printer"*) (see item 30, fig.4 and col.6, lines 6-11).

Regarding claim 37, *Priddy discloses* a method according to claim 35 wherein the low density corresponds to the pattern elements being left substantially free of marking material, when the image is applied to a product (*product, i.e., "the printer"*) (see item 30, fig.4 and col. 6, lines 6-11).

Regarding claim 38, *Priddy discloses* a method according to claim 37 including defining a size of each of the pattern elements, the size depending on whether the pattern element is high density or low density (*determining density, i.e., "high density or low density"*) (see items 104, 106 & 108, fig.5, determining density and col.6, lines 6-11).

Regarding claim 39, *Priddy discloses* a method according to claim 34 further comprising classifying the content within the region as high density or low density (*determination of density, i.e., "the high density or the low density"*) (see item 106, fig.5 and col.6, lines 6-11) and

selecting the low pattern element density if the content is high density (*determination of density, i.e., "the high density or the low density"*), and the high pattern element density if the content is low density (see item 106, fig.5 and col.6, lines 6-11).

Regarding claim 40, *Pirddy discloses* a method according to claim 39 wherein the content within said region is classified as high, low or intermediate density

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(determination of density, i.e., "the high, the low or the intermediate density") (see item 104, fig.5 and col.6, lines 6-11) , and

the method further comprises modifying the content in the intermediate density content regions to make it higher or lower density thereby to maintain contrast between the content (determination of density, i.e., "the higher or the lower density) and the pattern in the intermediate density regions (determination of density, i.e., "the intermediate density" (see item 104, fig.5 and col.6, lines 6-11).

Regarding claim 41, *Priddy* discloses a method according to claim 31 wherein the characteristic (determination of density and size, i.e., "the characteristic" is a characteristic of the content (see items 104, 106 and 108, fig.5).

Regarding claim 42, *Priddy* discloses a method according to claim 41 wherein, the characteristic is the density of the content (determination of density, i.e., "the density of the content"), which is limited to at least one predetermined range to maintain contrast between the content and the pattern within the region (see items 104, 106 and 108, and col.6, line 66-col.7, line 6).

Regarding claim 43, *Peter* discloses a method according to claim 31 wherein the image is applied to a product using a marking material (center points of a marking, i.e., "the marking material"), the marking material being the same for the pattern and the content (see page 8, lines 13-25).

Regarding claim 44, *Peter* discloses a method according to claim 41 wherein the characteristic of the content is the nature of the marking material (center points of a

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marking, i.e., "the marking material") to be used when applying the content to a product (see page 8, lines 13-25).

Regarding claim 45, *Peter discloses a method according to claim 44 wherein the marking material (large markings/raster points, i.e., "the marking material") is selected to be different from that selected for applying the pattern to the product (see page 9, line 25-page 10, line 5).*

Regarding claim 46, *Peter discloses a method according to claim 31 further comprising applying the image to a product (product, i.e., "the product") (see fig.1).*

Regarding claim 47, *Peter discloses a method according to claim 46 wherein the pattern and the content are applied to the product in a one-pass process (see fig.1).*

Regarding claim 48, *Priddy discloses a method according to claim 46 wherein the pattern and the content are applied to the product by a printer (optical scanner and printer, i.e., "the product by a printer") (see items 24 and 30, fig.4).*

Regarding claim 49, Computer program product for generating an image comprising a position identifying pattern and content, the computer program product comprising:

a computer usable medium having computer usable program code embodied therewith, the computer usable program code comprising:

computer usable program code configured to define criteria relating to a region where the content and the pattern are superimposed,

the criteria determining whether the pattern will be distinguishable over the content when applied to a product;

computer usable program code configured to identify such a region in the image; and

computer usable program code configured to select a characteristic of the pattern or the content in the region on the basis of the criteria, such that the image in the region meets the criteria.

Regarding claim 50, *Lapstun discloses* a printer client comprising a processor for producing documents comprising:

a pattern allocation module configured to allocate an area of pattern space to the document and generate position identifying pattern for that area using a pattern generation algorithm; and

a printer driver configured to combine content and the position identifying pattern into a single file, in which the printer driver is configured to identify a region where the content and the position identifying pattern are superimposed, and

select a characteristic of the position identifying pattern or the content in the region on the basis of criteria for determining whether the position identifying pattern will be distinguishable over the content when applied to a product, such that the image in the region meets the criteria.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKLILU k. WOLDEMARIAM whose telephone number is (571)270-3247. The examiner can normally be reached on Monday-Thursday 6:30 a.m-5:00 p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bali Vikkram can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL G MARIAM/
Primary Examiner, Art Unit 2624

/A. k. W./
Patent Examiner, Art Unit 2624
12/10/2009